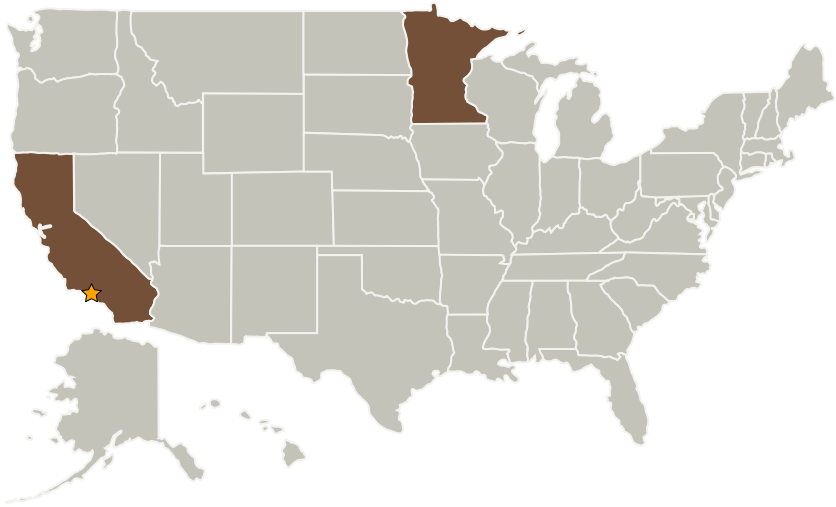
X-Band to W-Band Doppler Radar Using Reconfigurable RF T/R MMIC Series, Phase I

Completed Technology Project (2007 - 2007)

Project Introduction

During Phase I, TLC will demonstrate and deliver a remote mixed-mode adjustable X-band to W-band transceiver chip that can perform well as a FMCW, super-heterodyne or pulse radar that meets space qualification specifications. This reconfigurable transceiver will serve as the basis for the precipitation & cloud measurement doppler radar system that will be developed, tested and delivered to NASA in Phase II.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★Jet Propulsion Laboratory(JPL)	Lead Organization	NASA Center	Pasadena, California
TLC Precision Wafer Technology, Inc.	Supporting Organization	Industry Minority-Owned Business, Small Disadvantaged Business (SDB)	Minneapolis, Minnesota

Primary U.S. Work Locations	
California	Minnesota

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Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Jet Propulsion Laboratory (JPL)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

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Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Technology Areas

Primary:

- TX14 Thermal Management Systems
  - TX14.2 Thermal Control Components and Systems
    - TX14.2.8 Measurement and Control